

User Manual

**RICON M2M terminal management
platform**

V1.0.3

RICON

A decorative graphic at the bottom of the page consisting of several overlapping, wavy bands of blue in various shades, ranging from light blue to a deep navy blue, creating a sense of movement and depth.

RICON company provide customers with comprehensive technical support, users can directly contact with the company headquarters.

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Introduction

Outline

This user manual helps user/technical/R&D learn how the RICON M2M terminal management platform works and how to operate it. The platform works with RICON S9921 3G router and S9931 DSL router, for the purpose of monitoring the connectivity of network, and also controlling devices remotely. In this manual, it introduced all features of platform. To show feature of platform, it has three main sections for each feature.

- **Task intro:** By setting up a task, it tells user what feature is going to be introduced and how the feature works.
- **Precondition:** It indicates what necessary step is before you can test the feature.
- **Operation steps:** explain detail steps to use the feature.

Version of manual

Product name	Version	Date
User manual of RICON M2M terminal management platform	V1.0.3	12/28/2011






Readers

This document applies to the following readers:

- R & D engineers
- Technical Support Engineer
- Customers

Symbol agreement

In this article the following signs may appear, they are defined as follows.

Symbol	Description
 Danger	Indicates text that has a high degree of risk, which if not avoided, could result in casualties or serious injury.
 Warning	Indicates text that has moderate or low level of risk, if not avoided, could result in minor or moderate injury.
 Attention	Indicates a text representation of the potential risks, if not avoided, may result in equipment damage, data loss, performance degradation, or unexpected results.
 Knack	Indicates a text can help you solve a problem or save you time.
 Explanation	Indicates a body of the text is additional information, is the body's stress and additions.

Graphical element reference agreement

Format	Description
“”	Quotation marks "" indicate button names and data types of interface table, such as clicking "OK."
>	Multi-level menus separated by ">". If you select "File> New> Folder", it means to find "Folders" menu under the "New" submenu which is under the "File" menu item.

Revision History

Revision history is accumulated for each document update. The latest version of the document contains all previous versions of the updated document.

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1 Overview

Outline

Chapter	Brief instruction
Product Introduction	Brief instruction of product
	Summarize feature of platform
User role	Introduce user role

1.1 Product Introduction

1.2 Feature summary

1.3 User role

2 Operation instructions

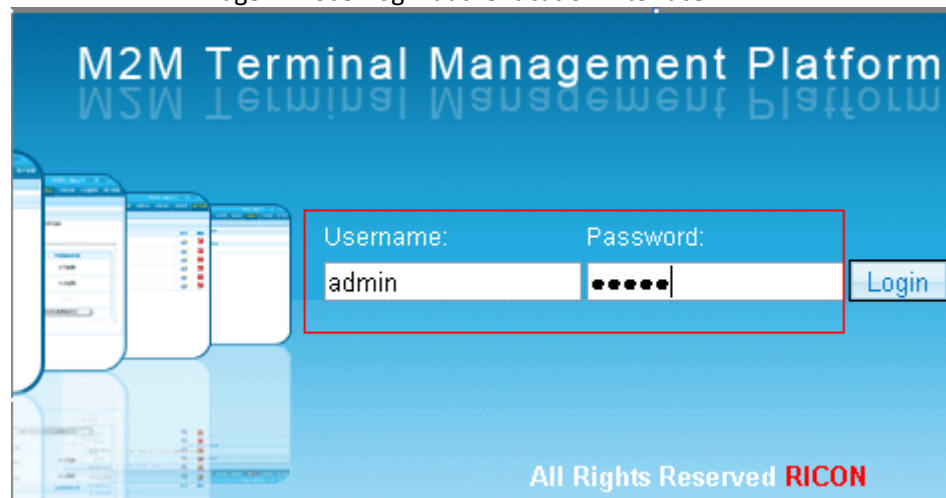
Outline

Chapter	Brief instruction
Login	Introduce steps to login platform and the precautions.
Log out	Introduce the steps to exit platform.
2.3 Initial of platform	Introduce initial of platform after installation
2.4 Terminal Section	Introduction The main function of the Terminal section, operating procedures and precautions.
Group section	Introduction The main function of the Group section, operating procedures and precautions.
2.6 System section	Introduction The main function of the System section, operating procedures and precautions.
User section	Introduction The main function of the User section, operating procedures and precautions.

2.1 Login to platform

- Open the computer IE (Internet Explorer) browser in computer, type in <http://192.168.8.1/> into the address bar so as to enter the user login authentication interface as shown in "Image 2-1 User login authentication interface"

Image 2-1 User login authentication interface



Explanation

Users can modify server IP address in the server configuration file.

- 1) Under the installation directory ".\M2M_SVR\conf", in the Configure.txt file, set "SVRIP" to server IP address, such as 192.168.8.1.

```
-#
```

```
#Server networking setting
```

```
SVRIP = 192.168.8.1 //Server IP address
WEBPORT = 9990 //Web request process port
CLIPORT = 9991 //Terminal request process port
DSCPORT = 9992 //Communication with DSC port number(UDP)
#Web UI timeout, Unit:Second
WEBSITEOUT = 30
```

- 2) Under the installation directory ".\M2M_SVR\UI\config", in file svrip.cfg, set the IP to server IP address, such as 192.168.8.1.

```
192.168.8.1:9990
```

Enter the user name and password, click "OK" button. You can log on to the platform.



Explanation

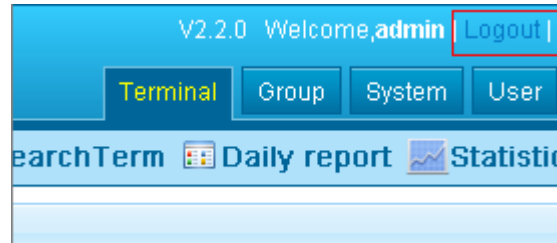
For the first time user login platform, user will need to use the default user name "admin" and password "admin". To change the password, please refer to "2.7.2 Edit user."

2.2 Logout

- After login into platform, click "Logout" link in the upper right corner, platform pop-up

confirmation prompt, click "OK" button to Logout platform, click "Cancel" button to stay.
Please refer to "Image 2-2Logout button" below.

Image 2-2 Logout button



2.3 Auto install setup

Task intro

Import rule to platform. When terminal registers to platform, the platform will send configuration in imported rule to terminal according to terminal serial number. Terminal will be rebooted automatically after it gets parameters, then with new parameters, it will register to platform again and start to work properly.

Precondition

User login to platform successfully.

2.3.1 Rule import

Task intro

Download template rule as excel file. Setup rule according to your needs, then upload rule to platform.


Precondition

- 1) Use template in platform
- 2) Setup proper rule according to user's needs.
- 3) Login to platform as admin successfully.

Operation steps



- Please note if parameter on terminal has been pre-set and no need to be changed. Don't setup rule with all parameters like APN, Username, Password, etc. Otherwise parameter in terminal will be modified by auto install feature.
 - A rule excel file should not being used when need to be imported.
 - Current platform support at most 20,000 rules.
-

- Click "system >  Auto install".
- Edit template according to user's needs. Import rule file according to instruction of each parameters in rule in "table 2-1 instruction of rule parameters":

2-1 Rule introduction

Parameter	Description	Configure
Router ID	Last 16 characters of serial number	For example: 32R201111ZH12001
WMMP-IP	Platform public IP address for registration	Public IP
WMMP-PORT	Platform service port for registration	Could be 0~65535, default value: 9991
SIM-1	SIM card number of SIM1	Normal SIM cards issued by ISP
APN-1	Access Point Name of SIM1	Provided by ISP
Username-1	Username of SIM1	Provided by ISP
Password-1	Username of SIM1	Provided by ISP
SIM-2	SIM card number of SIM2	Normal SIM cards issued by ISP
APN-2	Access Point Name of SIM2	Provided by ISP
Username-2	Username of SIM2	Provided by ISP
Password-2	Password of SIM2	Provided by ISP

- Import rule file, according to instruction "2.6.2 Import rules".

2.3.2 SLA setting


Task intro

Users can set a proper threshold of alarm, when any value of terminal state exceeds the threshold, alarm will be triggered and alarm record will be shown in platform.

Precondition

- 1) Legal terminal register to the platform.
- 2) Admin user login to platform.

Operation steps

- Click the "System>  SLA set", edit the threshold. Click "OK" button to complete the threshold settings. Click the "Reset" button to reset the input data. Specific methods of operation, please refer to "2.6.1 alarm threshold settings (Set SLA)"

2.3.3 Group (Separate terminals by Group)

Task intro

Initially, there is only one group in platform. It is Home group. All of the legal unities of the terminal are assigned to home groups by default. According to use's needs, new group can be created and terminals can be moved among all groups.

Precondition

- 1) Legal terminal has registered to platform.
- 2) Legal user login to platform successfully.

Operation steps

- Create new group under Home group, please refer to "2.5.1 new terminal group" for specific instruction.
- Assign terminals to different new created group under Home group. Please refer to "2.5.4 new terminal group" for specific instruction.

2.4 Terminal section

Task intro

Terminal section, monitors terminal operation, alarm, and generate statistic report of terminals.

Precondition

Legal user of platform login to platform successfully.

2.4.1 Terminal list

Task intro

Terminal list is a list of all terminals in platform. In the list, it shows current state and some information of terminals including agent id, terminal id, IP, and operational information: signal strength, network type, terminal SIM card, the total flow, the firmware version, the installation location, which brings users convenience to know states of terminals.

Precondition

Legal user of platform login to platform successfully.

Operation steps


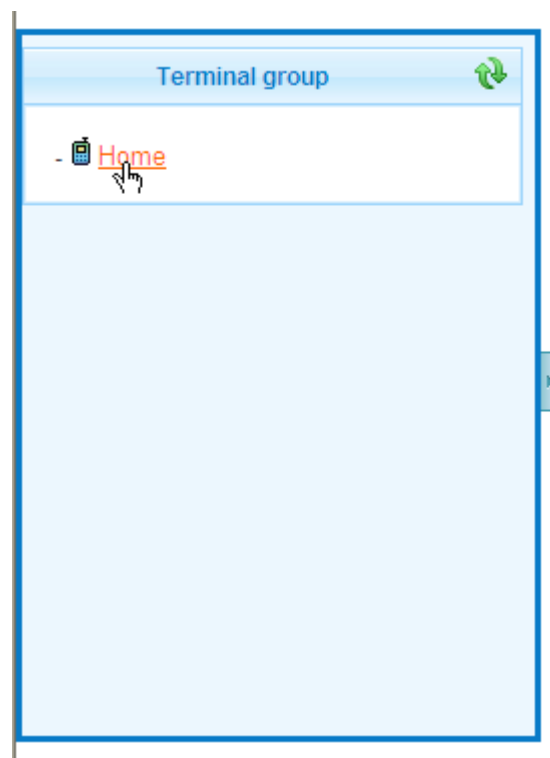
- Click the "Terminal", terminals in home group will be listed.
- Move the cursor to “” on the left side of web site, a window with group tree will be shown.
- Keep the cursor inside the window, click name of terminal group, terminal list will show terminals under the specific group. Please refer to "Image 2-3 Select terminal group" for specific instruction.

Image 2-3 Select terminal group



2.4.2 Terminal detail

Task intro

Terminal details, show basic information of terminal and state of network connectivity including (IP, current session time, total online time, current flow, total flow, sim1 total flow, sim2 total flow, signal strength, packet loss rate, out of service, SIM switch, SIM type, network switch, net type, current cell, cell switch) and some links to other pages related to terminal monitoring.

Precondition

Legal user of platform login to platform successfully.

Operation steps

- Click the "Terminal", move the cursor to " " on the left side of web site, a window with group tree will be shown. Click name of terminal group, terminal list will show terminals under the specific group. Please refer to "Image 2-3 Select terminal group" for specific instruction.
- Click Agent ID, terminal ID or " " icon, the detail information of terminal will be shown. Please refer to "Image 2-4 Access to terminal detail page"

Image 2-4 Access to terminal detail page

There are 31 terminals in Home, and 31 terminals online.

Select	No.	Status	Agent ID	Terminal ID	IP	Signal	Net type	SIM
<input type="checkbox"/>	1		0H8921SR20111031	0H8921SR20111031	202.170.138.80		WIRED	
<input type="checkbox"/>	2		32R201109ZH12001	32R201109ZH12001	192.168.0.111	-97	EVDO	SIM-1
<input type="checkbox"/>	3		32R201109ZH12002	32R201109ZH12002	192.168.0.111	-97	EVDO	SIM-1
<input type="checkbox"/>	4		32R201109ZH12003	32R201109ZH12003	192.168.0.111	-71	EVDO	SIM-1
<input type="checkbox"/>	5		32R201109ZH12004	32R201109ZH12004	192.168.0.111	-71	EVDO	SIM-1

2.4.3 Reboot terminal (terminal detail > reboot)

Task intro

Restart a specific terminal, the terminal can remotely be rebooted through the "terminal detail" page, so as for some special service update in router to take effect and also for a fast reboot of terminal when necessary.

Precondition

Legal user of platform login to platform successfully.

Operation steps



Terminal must be online before they can be restarted through platform.

- Access terminal detail page of terminal. Please refer to “2.4.2 terminal detail” for specific instruction.



- Click “[Reboot terminal](#)”, a window pop-up confirming whether to continue or not. Click “OK” to continue, click “Cancel” to abort.

2.4.4 Set parameter terminal (terminal detail > Edit parameters)

Task intro

Configure parameter of terminal remotely; Check latest parameter of terminal to confirm if parameter has been modified.

Precondition

Legal user of platform login to platform successfully.

Operation steps










- Terminal has to be online before parameter could be modified.
-

- Access terminal detail page of terminal. Please refer to “2.4.2 Terminal detail” for specific instruction.



- Click button “[Edit parameter](#)”, access the page for modifying parameter of the specific terminal. Please refer to “Image 2-5 Terminal detail page”.

Image 2-5 Terminal detail page

Terminal operating information								
Status	IP		Current time	total time	Current flow	total flow	sim1 flow	sim2 flow
	No yet		0Day 0Hour 0Min 0Sec	0Day 1Hour 2Min 50Sec	0	2.54KB	1.61KB	950Byte
Signal strength	Availability	Out of service	SIM switch	SIM type	Network switch	Net type	Current cell	Cell switch
	52	0	0		0		0	0
Terminal								
 Reboot terminal		 Edit parameter		 Advance parameter		 Alarm record		 Daily report
 Remote log								



Explanation

- 1) In the same terminal list page, parameters of multiple terminals can be selected to be updated at a time. In this case, when try to get parameters from terminal; system will reply parameter of terminal which has the smallest number in terminal list.
- 2) There are several different sections in the parameter configure page according to different feature.
 - ✚ After parameter are set on the page of platform, click "SAVE" button to send configuration to remote terminal.
 - ✚ Then click "Refresh" button to view the state of the operation. If state is changed from "Sending configuration" to normal, it means parameter has been set successfully.
 - ✚ If state is changed to be "Get failed" It means system didn't get parameter successfully after parameter is sent. So system does not know whether the parameter has been configured successful or not.
 - ✚ Then please click "get latest parameter" till the state is changed to be "Normal" And then check the parameters on page and confirm whether it is the parameter you have sent. The following are contrast of parameters on platform and device.

LAN section, please refer to "Image 2-6 LAN parameter":

Image 2-6 LAN parameter

LAN	Modem	Parameter Select	DHCP Server	ICMP Check	SNMP	M2M	Remote Log
-----	-------	------------------	-------------	------------	------	-----	------------

IP Address	<input type="text" value="192.168.86.88/24"/>	(eg.A.B.C.D/M)
<div>Save Refresh get latest parameter</div>		

CLI:
interface br0
ip address 192.168.86.88/24

Contrast to terminal GUI as in “Image 2-6 platform LAN parameter”.

Image 2-6 platform LAN parameter

Network Applications Forward System Tools Status

LAN Modem Parameter Select DNS DHCP Server

LAN Configure

LAN Connection Type

Connection Type Static IP

Local Network 172.16.22.33/24 (eg. A.B.C.D/M)

Save Refresh



Explanation

IP of LAN interface is used for access of router GUI, please remember the IP once it is changed.

Modem section: please refer to “Image 2-8 Modem parameter in platform”.

Image 2-8 Modem parameter in platform

urrent configuration state: Normal ☐ save to all online auto retry times: (times) Terminal ID:

Modify parameter

Modem

Parameter Select

DHCP Server

ICMP Check

SNMP

M2M

Remote Log

Clock

MODEM 1		MODEM 2	
Service Code	<input type="text"/>	Service Code	<input type="text"/>
APN	<input type="text"/>	APN	<input type="text"/>
User Name	<input type="text" value="card"/>	User Name	<input type="text" value="card"/>
Password	<input type="password" value="...."/>	Password	<input type="password" value="...."/>
Simcard	<input checked="" type="radio"/> SIM1 <input type="radio"/> SIM2	Simcard	<input type="radio"/> SIM1 <input checked="" type="radio"/> SIM2
Advance	<div></div>	Advance	<div></div>

Save

Refresh

get latest parameter

Contrast to terminal GUI as in “Image 2-9 Modem parameter in terminal GUI”.

Image 2-9 Modem parameter in terminal GUI

Network

Applications

Forward

System Tools

Status

LAN

Modem

Parameter Select

DNS

DHCP Server

Modem Configure

Modem Parameter

Name	APN	Service Code	User Name	Simcard	Action			
2	----	----	card	SIM2	Mod	Del	En	Dis
1	----	----	card	SIM1	Mod	Del	En	Dis

Add

Refresh



Explanation

Advance setting could set some advanced configuration

Parameter Select section: please refer to “Image 2-10 platform Parameter Select feature”

Image 2-10 platform Parameter Select feature

Modify parameter

Parameter Select

DHCP Server

ICMP Check

SNMP

M2M

Remote Log

Primary Rule

Interval60(1-512)

Retry3(1-512)

Running Timeout23(1-65535)

Interfacemodem 1

Actionicmp

Check IP(eg.A.B.C.D)

Backup Rule

Interval60

Retry3

Running Time out23

Interfacemodem 1

Actionicmp

Check IP

Save

Refresh

get latest parameter

Contrast to terminal GUI as in “Image 2-11 Parameter Select in terminal GUI”.

Image 2-11 Parameter Select in terminal GUI

NetworkApplicationsForwardSystem ToolsStatus

LANModemParameter SelectDNSDHCP Server

Parameter Select Configure

Parameter Select Rules

Rule Name	Interval(s)	Retry	Timeout(s)	edit	
2	60	3	23	Mod	Del
1	60	3	23	Mod	Del

Add

Refresh

DHCP Server section: please refer to “Image 2-12 platform DHCP parameter”

Image 2-12 platform DHCP parameter

Modify parameter	
parameter Select	
DHCP Server	
ICMP Check	
SNMP	
M2M	
Remote Log	
IP Address Range Start	<input type="text" value="2.2.2.3"/> (eg. A.B.C.D)
IP Address Range End	<input type="text" value="2.2.2.20"/> (eg. A.B.C.D)
GateWay	<input type="text" value="2.2.2.30"/> (eg. A.B.C.D)
DNS1	<input type="text" value="2.2.2.30"/> (eg. A.B.C.D)
DNS2	<input type="text" value="2.2.2.30"/> (eg. A.B.C.D)
Client Lease Time	<input type="text" value="3"/> (1-65535)
Status	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Save	Refresh get latest parameter

Contrast to terminal GUI as in “Image 2-13 DHCP parameter in terminal GUI”.

Image 2-13 DHCP parameter in terminal
GUI

NetworkApplicationsForwardSystem ToolsStatus

LANModemParameter SelectDNSDHCP Server

DHCP Configure

Add IP And MAC

IP Address

(eg. A.B.C.D)

MAC Address

(eg. 00:1A:4D:34:B1:8E)

Add

MAC Address

IP Address

Operation

Status

DHCP Server

EnableDisable

DHCP Server Settings

Ip Pool

custom

IP Address Range Start

2.2.2.3

(eg. A.B.C.D)

IP Address Range End

2.2.2.20

(eg. A.B.C.D)

GateWay Type

custom

Static Gateway

2.2.2.30

(eg. A.B.C.D)

DNS Connection Type

custom

DNS1

2.2.2.30

(eg. A.B.C.D)

DNS2

2.2.2.30

(eg. A.B.C.D)

Client Lease Time

3

(1-65535)

Save

Refresh

Configuration of ICMP Check parameter, please refer to “Image 2-14 ICMP parameter of platform”:

Image 2-14 ICMP parameter of platform

State: Normal

☐ save to all online

auto retry times: 5 (times)

Terminal ID: 32R20

Modify parameter

parameter Select

DHCP Server

ICMP Check

SNMP

M2M

Remote Log

Clock

Check IP Or Domain

www.baidu.com

Max Failure Times

3

(1-512)

Normal Interval

3

(1-512)

Failed Interval

3

(1-512)

Status

☐ Enable

☒ Disable

Save

Refresh

get latest parameter

n

Contrast to terminal GUI as in “Image 2-15 ICMP parameter in terminal GUI”.

Image 2-15 ICMP parameter in terminal GUI

Network

Applications

Forward

System Tools

Status

ICMP Check

Interface Check

DDNS

DTU

SNMP

M2M

Wake

ICMP Configure

Status

ICMP Check Service

Enable

Disable

ICMP Check Rule

Check Ip Or Domain

www.baidu.com

Max Failure Times

3

(1-512)

Normal Interval

3

(1-512)

Source IP or Interface

none

Failed Interval

3

(1-512)

Save

Refresh

Configuration of SNMP parameter, please refer to “Image 2-16 SNMP parameter of platform”:

Image 2-16 SNMP parameter of platform

ormal

☐ save to all online

auto retry times: 5 (times)

Termin

Modify parameter

Select

DHCP Server

ICMP Check

SNMP

M2M

Remote Log

Snmp Port

3434

(1-65535)

Snmp Community

rewqr

Status

☐ Enable

☒ Disable

Save

Refresh

get latest parameter

Contrast to terminal GUI as in “Image2-17 SNMP parameter of terminal”:

Image2-17 SNMP parameter of terminal

Network

Applications

Forward

System Tools

Status

ICMP Check

Interface Check

DDNS

DTU

SNMP

M2M

Wake

SNMP Configure

Status

SNMP Service

Enable

Disable

Setting Content

SNMP Port

3434

(1-65535)

SNMP Community

.....

Save

Refresh

Configuration of M2M parameter, please refer to “Image 2-18 M2M parameter configuration in platform”:

Image 2-18 M2M parameter configuration in platform

Normal ☐ save to all online auto retry times: (times) Terminal

Modify parameter

Select	DHCP Server	ICMP Check	SNMP	M2M	Remote Log
--------	-------------	------------	------	------------	------------

IP Address(domain)	<input type="text" value="172.16.22.41"/>
Server Port	<input type="text" value="9991"/> (1-65535)
Check Connected IP1	<input type="text" value="119.97.224.210"/> (eg. A.B.C.D)
Check Connected IP2	<input type="text" value="3.3.3.3"/> (eg. A.B.C.D)
Login Times	<input type="text" value="4"/> (1-5)
Heartbeat Interval	<input type="text" value="60"/> (1-65535)
Repeat Sending Times	<input type="text" value="5"/> (1-5)
Task Failure Time	<input type="text" value="10"/> (1-65535)
Status	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
<div><input type="button" value="Save"/> <input type="button" value="Refresh"/> <input type="button" value="get latest parameter"/></div>	

Contrast to terminal GUI as in “Image 2-19M2M parameter of terminal”:

Image 2-19M2M parameter of terminal

The screenshot shows the 'M2M Configure' page in the RICON M2M terminal management platform. The page has a top navigation bar with tabs: Network, Applications (selected), Forward, System Tools, and Status. Below the navigation bar is a sub-menu with buttons: ICMP Check, Interface Check, DDNS, DTU, SNMP, M2M (selected), and Wake Up. The main content area is titled 'M2M Configure' and is divided into three sections: Status, Basic Configure, and Advanced Configure. The Status section shows 'M2M Service' with 'Enable' and 'Disable' buttons. The Basic Configure section has four rows: 'IP Address(domain)' with value '172.16.22.41', 'Server Port' with value '9991' and range '(1-65535)', 'Check Connected IP1' with value '119.97.224.210' and range '(eg. A.B.C.D)', and 'Check Connected IP2' with value '3.3.3.3' and range '(eg. A.B.C.D)'. The Advanced Configure section has four rows: 'Login Times' with value '4' and range '(1-5)', 'Heartbeat Interval' with value '60' and range '(1-65535)', 'Repeat Sending Times' with value '5' and range '(1-5)', and 'Task Failure Time' with value '10' and range '(1-65535)'. At the bottom right are 'Save' and 'Refresh' buttons.

Section	Parameter	Value	Range/Example
Status	M2M Service	Enable	
		Disable	
Basic Configure	IP Address(domain)	172.16.22.41	
	Server Port	9991	(1-65535)
	Check Connected IP1	119.97.224.210	(eg. A.B.C.D)
	Check Connected IP2	3.3.3.3	(eg. A.B.C.D)
Advanced Configure	Login Times	4	(1-5)
	Heartbeat Interval	60	(1-65535)
	Repeat Sending Times	5	(1-5)
	Task Failure Time	10	(1-65535)

Explanation

Please carefully fill out IP and port number here. If any erroneous, it will cause the device not be able to connected to the platform。

Configuration of remote log of platform, please refer to “Image2-20 remote log of platform”:

Image2-20 remote log of platform

<input type="checkbox"/> save to all online		auto retry times: <input type="text" value="5"/> (times)		Terminal ID
Modify parameter				
DHCP Server	ICMP Check	SNMP	M2M	Remote Log
Check IP Or Domain	<input type="text" value="192.18.3.4"/>			
Check Port	<input type="text" value="5555"/> (1-65535)			
Status	<input checked="" type="radio"/> Enable <input type="radio"/> Disable			
<input type="button" value="Save"/> <input type="button" value="Refresh"/> <input type="button" value="get latest parameter"/>				

Contrast to terminal GUI as in “Image 2-21 Remote log parameter of terminal”:

Image 2-21 Remote log parameter of terminal

Network	Applications	Forward	System Tools	Status
Local Log	Remote Log	Clock	Account	Tools
Files				
Log Configure				
Status				
Remote Log Status		<input type="button" value="Enable"/> <input type="button" value="Disable"/>		
Remote Log Setting				
Check Ip Or Domain		<input type="text" value="192.18.3.4"/>		
Remote Port		<input type="text" value="5555"/> (1-65535)		
<input type="button" value="Save"/> <input type="button" value="Refresh"/>				

Configuration of clock in platform, please refer to “Image2-22 clock parameter of platform”:

Image2-22 clock parameter of platform

Modify parameter

eter Select	DHCP Server	ICMP Check	SNMP	M2M	Remote Log	Clock
-------------	-------------	------------	------	-----	------------	--------------

NTP Server IP or Domain:

NTP Synch. Interval: (1-65535)

Time Zone:

Status: ☒ Enable ☐ Disable

Contrast to terminal GUI as in “Image2-23 clock parameter of terminal”:

Image2-23 clock parameter of terminal

Network Applications Forward **System Tools** Status

Local Log Remote Log **Clock** Account Tools Files

System Clock Configure

Status

Status:

NTP Server IP or Domain:

NTP Synch. Interval: (1-65535)

Time Zone:

Configuration of NAT, please refer to “Image 2-24 NAT parameter of platform”:

Image 2-24 NAT parameter of platform

Modify parameter							
DHCP Server	ICMP Check	SNMP	M2M	Remote Log	Clock	NAT	PAT
Source Interface	Source Port	Replace Address	Replace port	Action			
1.0.0.2		3.3.3.3		Delete			
163.3.3.3		175.3.3.3		Delete			
Add Refresh get latest parameter							

Contrast to terminal GUI as in “Image 2-25 NAT parameter of router”:

Image 2-25 NAT parameter of router

Network	Applications	Forward	System Tools	Status		
NAT Static Route						
NAT Rules Configure						
MASQ Mode						
Interface				Action		
modem				Delete		
NAT/NAPT Rules						
chain	Protocol	Outside Address	source Port	Replace Address	Replace Port	Action
source	all	1.0.0.2	----	3.3.3.3	----	Delete
source	all	163.3.3.3	----	175.3.3.3	----	Delete
Add Refresh						

Patch management: Click “Delete” to remote patch from terminal device; Click “Refresh” to view the record to view the state of parameter Configure section. If it state is “Get failed”, please click “get latest parameter” to retrieve information from device. Please refer to “Image 2-26 patch management in platform”

Image 2-26 patch management in platform

Modem	Parameter Select	DHCP Server	ICMP Check	SNMP	M2M	Remote Log	Clock	NAT	PATCH
Select	No.	Patch Name				Action			
<input checked="" type="checkbox"/>	1	cli				Delete			
<input type="checkbox"/>	2	wmmp				Delete			
<input type="checkbox"/>	3	modem				Delete			
<input type="checkbox"/> Select all		Delete		Refresh		get latest parameter			



Delete patch: when performing bulk modification operations, if patch exists in terminal, delete it. If not, then no operations.

Option 2

- Click “Terminal”, platform show list of Home group by default.
- Select terminal in terminal list, then choose “Modify parameter” and click “OK” to enter the parameter configuration page. Please refer to “Image 2-27 terminal list”:

Image 2-27 terminal list

There are 11 terminals in Home, and 10 terminals on

Select	No.	Status	Agent ID	Terminal ID	IP	Signal	Net type	SIM
<input checked="" type="checkbox"/>	1		W000000000010000	W000000000010000	172.16.22.41	-51	WCDMA	SIM-1
<input type="checkbox"/>	2		W000000000010001	W000000000010001	172.16.22.41	-51	TD-SCDMA	SIM-1
<input type="checkbox"/>	3		W000000000010002	W000000000010002	172.16.22.41	-113	TD-SCDMA	SIM-1
<input type="checkbox"/>	4		W000000000010003	W000000000010003	172.16.22.41	-53	CDMA	SIM-1
<input type="checkbox"/>	5		W000000000010004	W000000000010004	172.16.22.41	-51	CDMA	SIM-1
<input type="checkbox"/>	6		W000000000010005	W000000000010005	172.16.22.41	-51	EVDO	SIM-1
<input type="checkbox"/>	7		W000000000010006	W000000000010006	172.16.22.41	-113	EVDO	SIM-1
<input type="checkbox"/>	8		W000000000010007	W000000000010007	172.16.22.41	-51	TD-SCDMA	SIM-1
<input type="checkbox"/>	9		W000000000010008	W000000000010008	172.16.22.41	-113	TD-SCDMA	SIM-1
<input type="checkbox"/>	10		W000000000010009	W000000000010009	172.16.22.41	-111	WCDMA	SIM-1
<input type="checkbox"/>	11		W000000000010010	W000000000010010	172.16.22.41			

Total: 1 Current: 1 First Previous Next Last [GO](#)

Choose the operation you want to apply on the selected

☐ Select all [Modify parameter](#) [Remote upgrade](#) [Upgrade progress status](#) [Restart terminal](#) [Modify parameter](#) [OK](#)

- Choose the parameter that need to be modified, then change it value, then click “SAVE” to send parameter to terminal. Then click “Refresh” to update page till the state change to “Normal”. Please refer to “option one” for operation introduction.

2.4.5 Setting advanced parameters on single terminal (terminal detail > advanced parameters)


Task intro

Set parameter of single terminal by text edit.

Precondition

Legal users successfully login platform system.

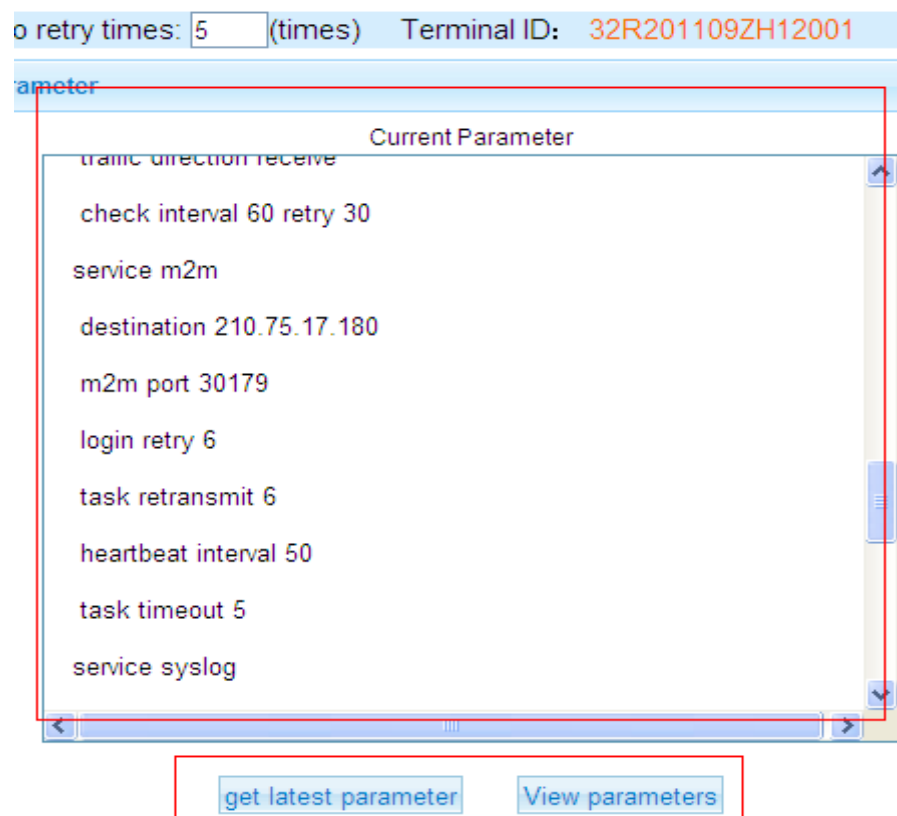
Operation steps

- Click “Terminal” to enter terminal list of HOME GROUP as default.
- Select the target Terminal group, you may check “Terminal list” for reference. Click “” icon on the right to check terminal details. You may check “Terminal details” for reference.



- Click “ [Advance parameter](#) ” on current window to enter advance setting page of single terminal. Click “get latest parameter” icon to get latest parameters. Click “view parameters” to show current terminal latest parameters. As shown below in “Image 2-28 advanced parameters”:

Image 2-28 advanced parameters



- Set your new parameters in “New Parameter” window, click “Save” icon to save your new

parameters. As shown in below “Image 2-29 save advance parameters”

Image 2-29 save advance parameters

terminal > Modify parameter

current configuration state: Normal ☐ Save to online terminal

Modify

New Parameter

service m2m

destination 210.75.17.180

m2m port 30179

login retry 6

task retransmit 6

heartbeat interval 50

task timeout 5

Save



Attention

Please check current Configuration status before modify it, especially when it shows normal and works normal.

2.4.6 Search single terminal alarm record (terminal detail > alarm record)



Task intro

Search single terminal alarm record. You could check all the alarm record of current terminal made after register to platform system successfully, including IP, version, alarm time, type and description.

Precondition

Legal users successfully login platform system.

Operation steps

- Click “Terminal” button on right top, then move the cursor to left middle “” icon. Select a terminal group you want search from. After select terminal group, click the  icon at right end to enter “terminal details” page. Please check “2.4.2 Terminal details” for details.



- Click “ [Alarm record](#) ” icon of “Terminal Operation”, the window will show all the alarm record of current terminal made after register to platform system successfully, including IP, version, alarm time, type and description, as shown in below “Image 2-30 Alarm record”:

Image 2-30 Alarm record

There are 51 records.

No.	Terminal ID	IP	Version	Alarm time	Alarm type	Description
1	32R201109ZH12001	192.168.0.111	1.2.3.4	2011-12-08 14:39:01	Signal	signal strength -113, below the threshold -100
2	32R201109ZH12001	192.168.0.111	1.2.3.4	2011-12-08 14:30:00	Signal	signal strength -113, below the threshold -100
3	32R201109ZH12001	192.168.0.111	1.2.3.4	2011-12-08 14:27:00	Signal	signal strength -111, below the threshold -100
4	32R201109ZH12001	192.168.0.111	1.2.3.4	2011-12-08 14:21:01	Signal	signal strength -113, below the threshold -100
5	32R201109ZH12001	192.168.0.111	1.2.3.4	2011-12-08 14:15:01	Signal	signal strength -107, below the threshold -100
6	32R201109ZH12001	192.168.0.111	1.2.3.4	2011-12-08 14:12:00	Signal	signal strength -111, below the threshold -100
7	32R201109ZH12001	192.168.0.111	1.2.3.4	2011-12-08 14:09:00	Signal	signal strength -109, below the threshold -100
8	32R201109ZH12001	192.168.0.111	1.2.3.4	2011-12-08 14:08:00	Signal	signal strength -107, below the threshold -100
9	32R201109ZH12001	192.168.0.111	1.2.3.4	2011-12-08 14:03:01	Signal	signal strength -105, below the threshold -100
10	32R201109ZH12001	192.168.0.111	1.2.3.4	2011-12-08 14:00:01	Signal	signal strength -101, below the threshold -100
11	32R201109ZH12001	192.168.0.111	1.2.3.4	2011-12-08 13:57:01	Signal	signal strength -107, below the threshold -100

2.4.7 Search Single terminal daily report (terminal detail > daily report)

Task intro

Search Single terminal daily report, you could check terminal network parameter record, including Signal(dBm), Online time(s), Out of service, Network switch, SIM switch, TX flow, RX flow, sim1 flow, sim2 flow, Packet loss, Avg latency, Cell switch.



Precondition

- 1) Legal users successfully login platform system.
- 2) Platform system has set an alarm SLA; please check 2.6.1 Set SLA for details.

Operation steps



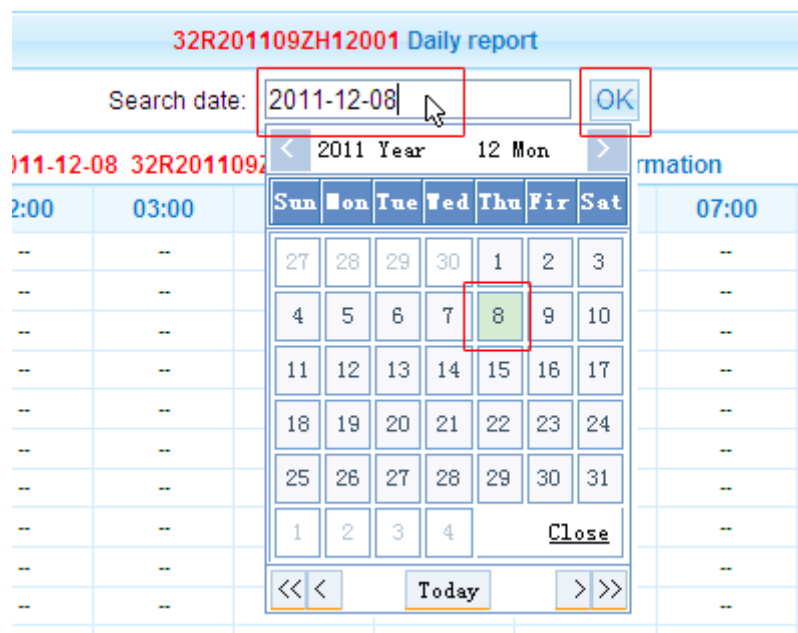
Search date cannot over current data.

- Click “Terminal” button on right top, then move the cursor to left middle “” icon. Select a terminal group you want search from. After select terminal group, click the “” icon at right end to enter “terminal details” page. Please check “2.4.2 Terminal details” for details.



- Click “ **Daily report** ” icon “Terminal Operation”, window will show terminal network parameter record of current time as default. You could input a data and click “OK” to inquire. As shown in “Image 2-31 search daily report”

Image 2-31 search daily report



32R201109ZH12001 Daily report

Search date: 2011-12-08 OK

2011-12-08 32R201109Z < 2011 Year 12 Mon > Information

02:00	03:00	Sun	Mon	Tue	Wed	Thu	Fri	Sat	07:00
--	--	27	28	29	30	1	2	3	--
--	--	4	5	6	7	8	9	10	--
--	--	11	12	13	14	15	16	17	--
--	--	18	19	20	21	22	23	24	--
--	--	25	26	27	28	29	30	31	--
--	--	1	2	3	4	Close			--
--	--	<< < Today > >>							--

Image 2-32 daily report search result

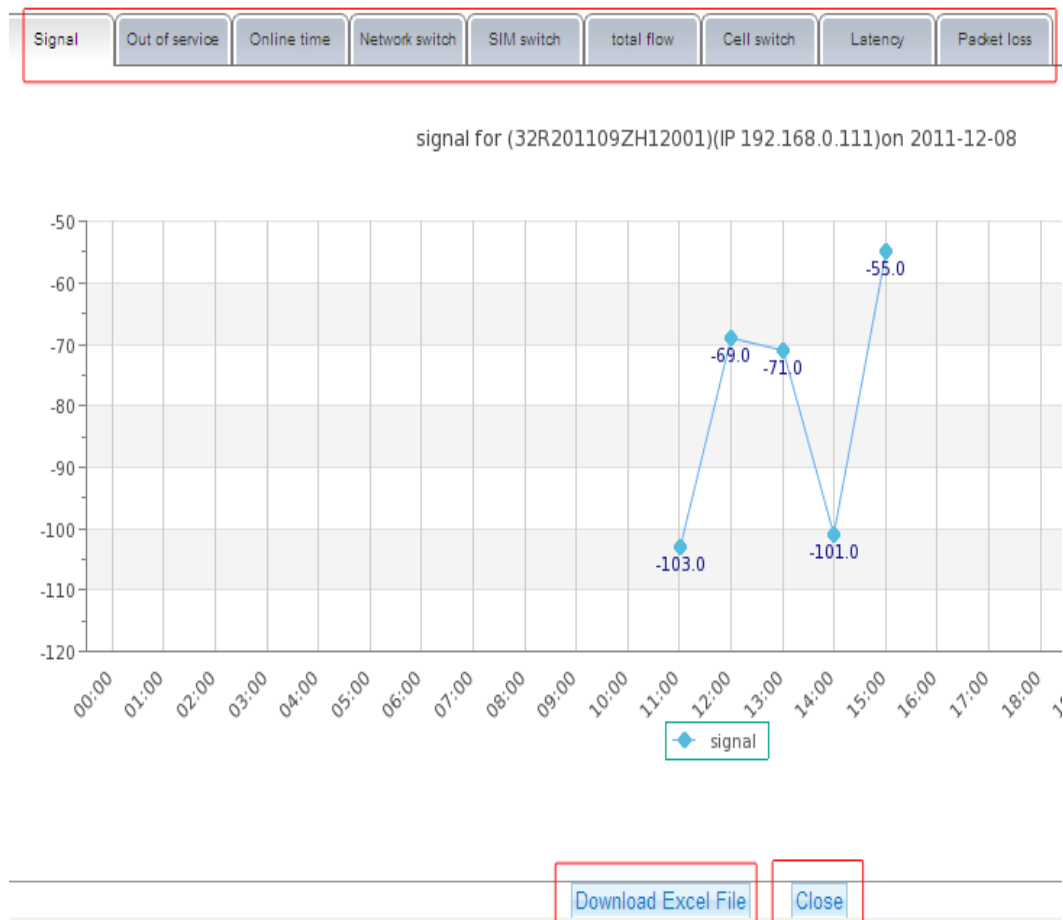
2011-12-08 32R201109ZH12001 Terminal operating inf

KPI \ Time	00:00	01:00	02:00	03:00	04:00	05:00	06:00
Signal(dBm)	-69	-71	-101	-69	-71	-101	-69
Online time(s)	3600	3600	3600	3600	3600	3600	3600
Out of service	0	0	0	0	0	0	0
Network switch	0	0	0	0	0	0	0
SIM switch	0	0	0	0	0	0	0
TX flow	28.41KB	30.04KB	29.3KB	28.41KB	30.04KB	29.3KB	28.41KB
RX flow	28.41KB	30.04KB	29.3KB	28.41KB	30.04KB	29.3KB	28.41KB
sim1 flow	28.41KB	30.04KB	29.3KB	28.41KB	30.04KB	29.3KB	28.41KB
sim2 flow	28.41KB	30.04KB	29.3KB	28.41KB	30.04KB	29.3KB	28.41KB
Packet loss	0	0	0	0	0	0	0
Avg latency	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cell switch	0	0	0	0	0	0	0
KPI \ Time	12:00	13:00	14:00	15:00	16:00	17:00	18:00
Signal(dBm)	-69	-71	-101	-69	-71	-101	--
Online time(s)	3600	3600	3600	3600	3600	3600	--
Out of service	0	0	0	0	0	0	--
Network switch	0	0	0	0	0	0	--
SIM switch	0	0	0	0	0	0	--
TX flow	28.41KB	30.04KB	29.3KB	28.41KB	30.04KB	29.3KB	--
RX flow	28.41KB	30.04KB	29.3KB	28.41KB	30.04KB	29.3KB	--
sim1 flow	28.41KB	30.04KB	29.3KB	28.41KB	30.04KB	29.3KB	--
sim2 flow	28.41KB	30.04KB	29.3KB	28.41KB	30.04KB	29.3KB	--
Packet loss	0	0	0	0	0	0	--
Avg latency	0.000	0.000	0.000	0.000	0.000	0.000	--
Cell switch	0	0	0	0	0	0	--

[View Graph & Download Excel](#)

- Click “[View Graph & Download Excel](#)” icon under this sheet. A window will pop up and show above sheet in Graph. You could download the sheet in Excel by click the “[Download Excel File](#)” icon. As shown in “Image 2-33 terminal network parameter record” below:

Image 2-33 terminal network parameter
record



2.4.8 Search Single terminal log (terminal detail > terminal remote log)

Task intro

Get the 15 days log of certain terminal, and you could download it in TXT.

Precondition

Legal users successfully login platform system.

Operation steps




- Click "Terminal" to enter terminal list of HOME GROUP as default.
- Select the target Terminal group, you may check "Terminal list" for reference. Click "📁" icon on the right to check terminal details. You may check "Terminal details" for reference.



- Click “[Remote log](#)” icon in this page and enter Single terminal page. As shown in below “2-34Remote log”:

2-34Remote log

	Current flow	total flow	sim1 flow	sim2 flow
Sec	377.76MB	4.96GB	1.81GB	3.15GB
	Network switch	Net type	Current cell	Cell switch
	37	EDGE	0	0

 Alarm record
  Daily report
  Remote log

- Click “**Refresh**” icon to refresh current page. Click “**get latest log**” icon to get log manually. (Terminal will send latest log to platform). Click Download link to download the log in TXT file, as show below “Image 2-35 Get log”:

Image 2-35 Get log

0000000010000Has 1 terminal remote log file.			
name	Log time	Log size	DownLoad
0010000	2011-11-09 15:03:01	1548	DownLoad
<input type="button" value="Refresh"/> <input type="button" value="get latest log"/>			

2.4.9 Check Terminal realtime alarm (alarm->realtime alarm)

Task intro

Check latest terminal real-time alarm, including terminal IP, version, time, alarm type and reason.

Precondition

Legal users successfully login platform system.

Operation steps

- Click Terminal >  Alarm to enter terminal alarm page, all terminal alarm will show in

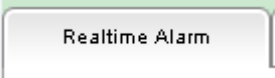
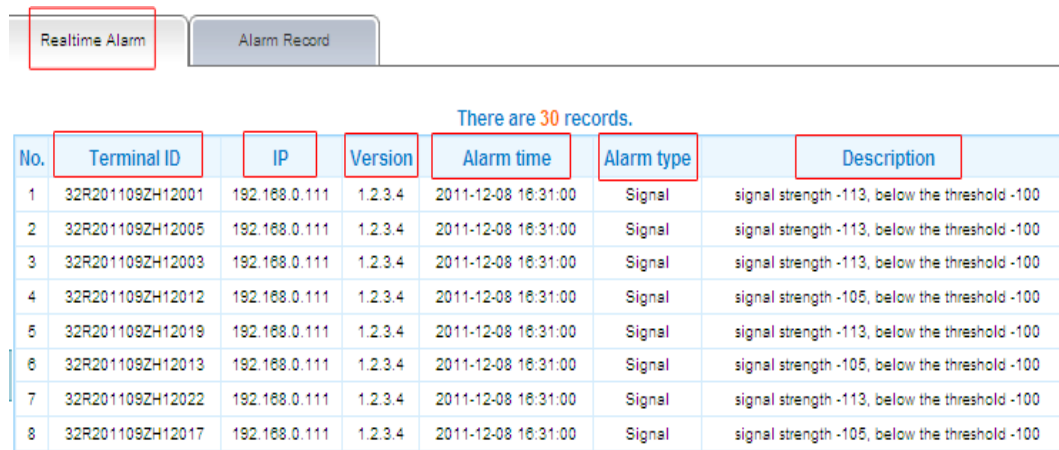
this page as default. Click “” again to get latest alarm record. As shown in follow “Image 2-36 Real-time Alarm list”

Image 2-36 Real-time Alarm list



No.	Terminal ID	IP	Version	Alarm time	Alarm type	Description
1	32R201109ZH12001	192.168.0.111	1.2.3.4	2011-12-08 16:31:00	Signal	signal strength -113, below the threshold -100
2	32R201109ZH12005	192.168.0.111	1.2.3.4	2011-12-08 16:31:00	Signal	signal strength -113, below the threshold -100
3	32R201109ZH12003	192.168.0.111	1.2.3.4	2011-12-08 16:31:00	Signal	signal strength -113, below the threshold -100
4	32R201109ZH12012	192.168.0.111	1.2.3.4	2011-12-08 16:31:00	Signal	signal strength -105, below the threshold -100
5	32R201109ZH12019	192.168.0.111	1.2.3.4	2011-12-08 16:31:00	Signal	signal strength -113, below the threshold -100
6	32R201109ZH12013	192.168.0.111	1.2.3.4	2011-12-08 16:31:00	Signal	signal strength -105, below the threshold -100
7	32R201109ZH12022	192.168.0.111	1.2.3.4	2011-12-08 16:31:00	Signal	signal strength -113, below the threshold -100
8	32R201109ZH12017	192.168.0.111	1.2.3.4	2011-12-08 16:31:00	Signal	signal strength -105, below the threshold -100

2.4.10 Search terminal history alarm record (alarm->alarm record)

Task intro

Search terminal history alarm record based on alarm type, terminal ID, Agent ID and date range.

Precondition

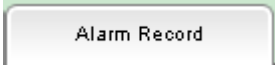
Legal users successfully login platform system.

Operation steps



- You need input at least one query condition.
 - Terminal ID & Agent ID must be fully spelled, do not support fuzzy query.
 - Query date cannot over current date.
-

- Click Terminal >  Alarm to enter terminal alarm page, all terminal alarm will show in

this page as default. Click “” to enter search page. Input your query

conditions and click OK to search. As shown in “Image 2-37 Search terminal Alarm record” below:

Image 2-37 Search terminal Alarm record

Realtime Alarm Alarm Record

Search Alarm Record

Alarm type: Availability

Terminal ID: 32R201109ZH12001

Agent ID:

Start and end date: >>

Note: At least one of Alarm type, terminal ID, agent ID has to be filled in.

OK Reset

2-1 Query condition instruction

Item	Meaning	How to Configure
Alarm Type	Alarm type	Select in dropdown list
Terminal ID	Terminal ID	Manually input, must be 16 Alphanumeric combination
Agent ID	Terminal name	Manually input, must be 16 Alphanumeric combination
Start and end date	Query date	Select a data. Need input both start and end date or keep both blank.

2.4.11 Check alarm terminal list (alarm list)


Task intro

Check alarm terminal list. You could divide the alarm terminal based on alarm type (Availability, Packet loss, Signal, Out of service, Cell switch, SIM switch) and check them in different page.

Precondition

Legal users successfully login platform system.

Operation steps

- Click Terminal >  **Alarm list** to enter terminal alarm list page, every tab shows one alarm type: Availability, Packet loss, Signal, Out of service, Cell switch, SIM switch. Click the tab to switch different type.

2.4.12 Search terminal

Task intro

Search terminal based on Agent ID, Location or IP, in order to provide a fast way to find a certain terminal.

Precondition

Legal users successfully login platform system.

Operation steps



Attention

- You need input at least one search condition.
- Fuzzy query, part key words of agent id or location is available search condition.


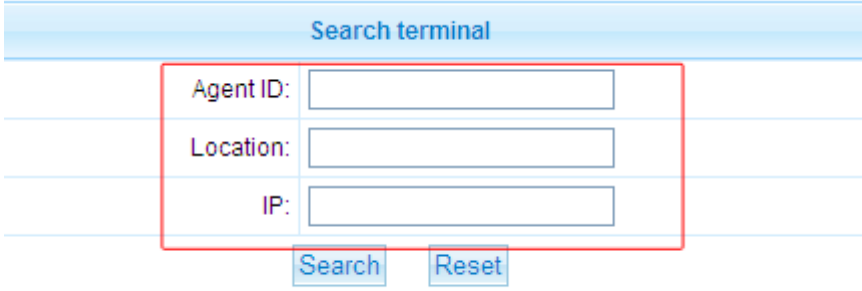
- Click Terminal >  **SearchTerm** to enter “Search Terminal” page.
- Input search condition and search, result will shown below as “Image 2-38 Search terminal”

Image 2-38 Search terminal



The screenshot shows a web interface titled "Search terminal". It contains three input fields labeled "Agent ID:", "Location:", and "IP:". Below these fields are two buttons labeled "Search" and "Reset". A red rectangular box highlights the three input fields.

2-2 Search terminal instruction

Item	Meaning	How to Configure
Agent ID	Terminal name	Manually input, must be 16 Alphanumeric combination

Item	Meaning	How to Configure
Location	Terminal install location	Manually input, must be 16 Alphanumeric combination
IP	Terminal IP	Manually input Value range: [0.0.0.1, 255.255.255.254]

2.4.13 Search terminal network parameter report (daily report)

Task intro

Search terminal network parameter report (daily report), search condition could be date, Terminal ID, Agent ID, Terminal version. And network parameters include (Signal(dBm), Online time(s), Out of service, Network switch, SIM switch, TX flow, RX flow, sim1 flow, sim2 flow, Packet loss, Avg latency, Cell switch).

Precondition

Legal users successfully login platform system.

Operation steps




- Search date is necessary.
 - Search condition need at least one of Terminal ID, Agent ID or Terminal version
-

- Click Terminal >  to enter "Daily report" page.
- Input search conditions and click OK to search.

2-2 Search condition instruction.

Item	Meaning	How to Configure
Search date	Search date	Select a date and this condition is necessary.
Terminal ID	Terminal ID	Manually input, must be 16 Alphanumeric combination

Item	Meaning	How to Configure
Agent ID	Terminal name	Manually input, must be 16 Alphanumeric combination
Version	Terminal version	Select from a dropdown list

- Click “” icon on the line end. Parameter record will display, includes (Signal(dBm), Online time(s), Out of service, Network switch, SIM switch, TX flow, RX flow, sim1 flow, sim2 flow, Packet loss, Avg latency, Cell switch).
- Click “[View Graph & Download Excel](#)” icon under this sheet. A window will pop up and show above sheet in Graph. You could download the sheet in Excel by click the “[Download Excel File](#)” icon.

2.4.14 Terminal alarm statistic (Statistic)


Task intro

According to Terminal ID, IP, Version and date, searching the Alarm statistic, result includes (Terminal ID, IP, Version, Availability, Signal, Out of service, Network switch, and SIM switch).

Precondition

Legal users successfully login platform system.

Operation steps

- Click Terminal >  to enter Statistic searching page.
- Input searching conditions, and click OK icon. Search result will be shown.

2-4 Search condition instruction

Item	Meaning	How to Configure
Terminal ID	Terminal ID	Manually input, must be 16 Alphanumeric combination
Agent ID	Terminal name	Manually input, must be 16 Alphanumeric combination
Version	Terminal version	Select from drop down list

Item	Meaning	How to Configure
Start and end date	Searching between these date.	Select a data. Need input both start and end date or keep both blank.

2.4.15 Remote upgrade terminal (terminal list drop down list)

Task intro

Remote upgrade terminal, send the upgrade packet to terminal and updating terminal to latest version.

Precondition

- 1) Legal users successfully login platform system.
- 2) Terminal online.

Operation steps



- Only online terminal could be upgraded.
-

- Click “Terminal” to enter terminal list of HOME GROUP as default.
- Click in the check box of terminals which need upgrade. Then select “Remote upgrade” at the bottom drop down list of this page and click OK.
- Select an upgrade package and click “Remote upgrade” to start your upgrade. A progress bar window will pop up as shown below in “Image 2-39 Select a upgrade packet”.

Image 2-39 Select a upgrade packet

Select upgrade package				
Select	Name	Version	Size(Byte)	Create date
<input type="checkbox"/>	 aaaaaaaa	term_fkey	5849348 Byte	2011-12-07 09:45:41
<div>Remote upgrade Select again</div>				

- Terminals which upgrade failed, you could click “Upgrade again” icon to upgrade again as shown in “Image 2-40 upgrade progress page”.

Image 2-40 upgrade progress page

Select	Agent ID	Package ID	Version	Package name	Upgrade
	W000000000010000	3	term_fkey	H7932_trx	
	W000000000010001	3	term_fkey	H7932_trx	
<input type="checkbox"/>	W000000000010002	3	term_fkey	H7932_trx	
<input type="checkbox"/>	W000000000010003	3	term_fkey	H7932_trx	
	W000000000010004	3	term_fkey	H7932_trx	Down
	W000000000010005	3	term_fkey	H7932_trx	
	W000000000010006	3	term_fkey	H7932_trx	
	W000000000010007	3	term_fkey	H7932_trx	
	W000000000010008	3	term_fkey	H7932_trx	
	W000000000010009	3	term_fkey	H7932_trx	
	W000000000010010	3	term_fkey	H7932_trx	
					<input type="checkbox"/> Select all Upgrade again

2.4.16 Check remote upgrade status (terminal list drop down list)

Task intro

Check remote upgrade status and select the failed terminal to upgrade again.

Precondition

- 1) Legal users successfully login platform system.
- 2) Terminal online

Operation steps

- Click “Terminal” to enter terminal list of HOME GROUP as default.
- Click in the check box of terminals which need upgrade. Then select “Upgrade progress status” at the bottom dropdown list of this page and click OK.
- Click Upgrade again to upgrade.

2.4.17 Restart terminal (terminal list drop down list)

Task intro

Restart terminal, in order to make the new parameters effective and start new service.

Precondition

- 1) Legal users successfully login platform system.
- 2) Terminal online

Operation steps



Terminal must online

- Click “Terminal” to enter terminal list of HOME GROUP as default.
- Click in the check box of terminals which need upgrade. Then select “Restart terminal” at the bottom dropdown list of this page and click OK. Then selected terminal will be rebooted.

2.4.18 Modify parameters (terminal list drop down list)

Task intro

Please refer to 2.4.4 Set parameter terminal

Precondition

Please refer to 2.4.4 Set parameter terminal

Operation steps

Please refer to 2.4.4 Set parameter terminal

2.5 Group section

About this function

After terminals registered to platform system, you could divide them into groups to convenient your management. You could create, edit, delete group.

Precondition

Legal users successfully login platform system.

2.5.2 Add new terminal group

Task intro

Add new group in home contents, in order to manage all terminals in group.

Precondition

Legal users successfully login platform system.

Operation steps


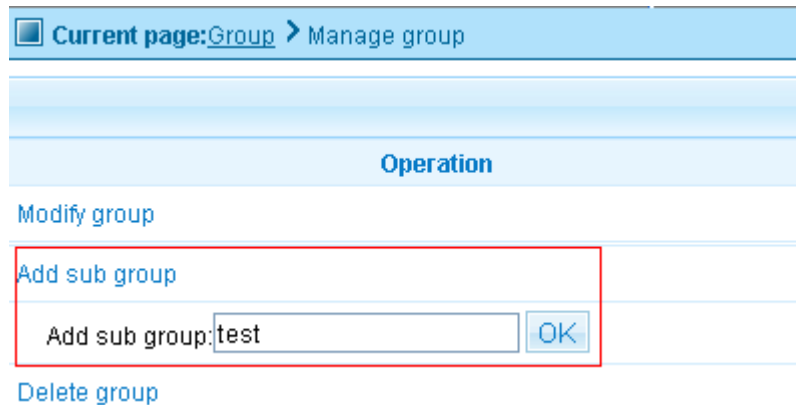
- Click Group to enter Group manages part.
- Click a group name in left tree catalogue, then click “ Manage Group” icon at top right corner, to manage this group
- You could add new sub group under current selected group.

Image 2-41 Add sub group



The screenshot shows a web interface for managing groups. At the top, there is a breadcrumb trail: "Current page: Group > Manage group". Below this, there is a section titled "Operation". Under "Operation", there are three links: "Modify group", "Add sub group", and "Delete group". The "Add sub group" link is highlighted with a red box. Below the "Add sub group" link, there is a form with a label "Add sub group:" followed by a text input field containing the text "test". To the right of the input field is an "OK" button.

2-4 Add sub group

Item	Meaning	How to Configure
group name	Group name	Manually input, must be 4-63 Alphanumeric combination

2.5.3 Modify Group


Task intro

Modify Group name.

Precondition

Legal users successfully login platform system.

Operation steps

- Click Group to enter Group manage part.
- Click a group name in left tree catalogue, then click “ Manage Group” icon at top right corner, to manage this group
- You could edit group name in this page, input a name and click OK icon as shown below.

2.5.4 Delete terminal group

Task intro

To delete terminal group, the record of a terminal group will be deleted from the platform. Meanwhile, all terminals in this group, all sub-groups in this group and all terminals in the sub-groups will be deleted.

Precondition

Login user is a legal user of the platform, and login on the platform successfully.

Operation steps



Attention

Home directory cannot be deleted.


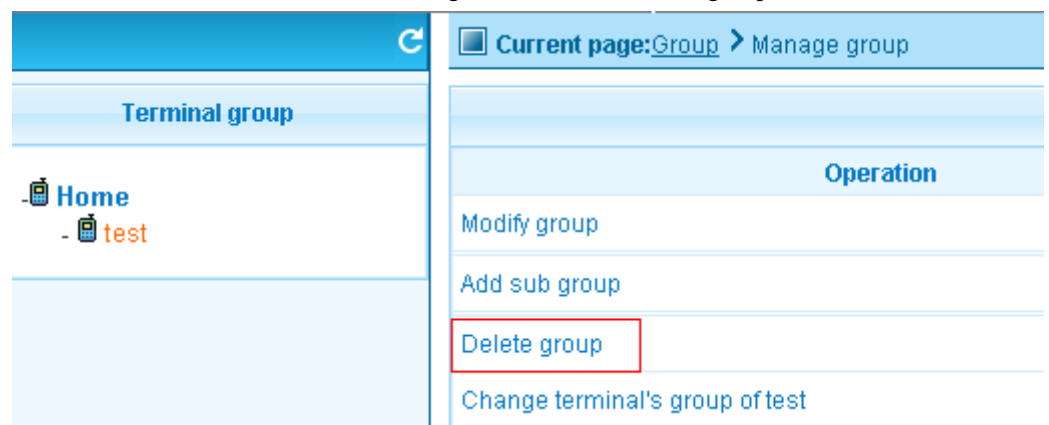
- Click “Group” to get into group
- Click a terminal group name on the left directory tree, and then click “ Manage Group” on the right top side to get into the “manage group” page.
- Click “Delete group”, then there will be a confirmation widow, click “OK” to delete all terminals in this group, all sub-groups in this group, and all terminals in the sub-groups. Click “Cancel” to get back to previous page without deleting operation. Refer to the following “Image 2-42 delete terminal group”.

Image 2-42 Delete terminal group



2.5.5 Chang group of terminal

Task intro

Change the directory of a terminal or to move a terminal in a group to another group.

Precondition

- 1) Login user is a legal user of the platform, and login on the platform successfully.
- 2) There is terminal in the group

Operation steps




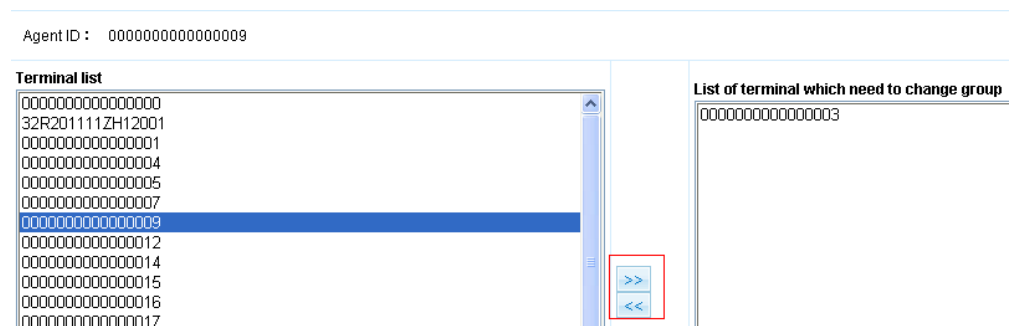
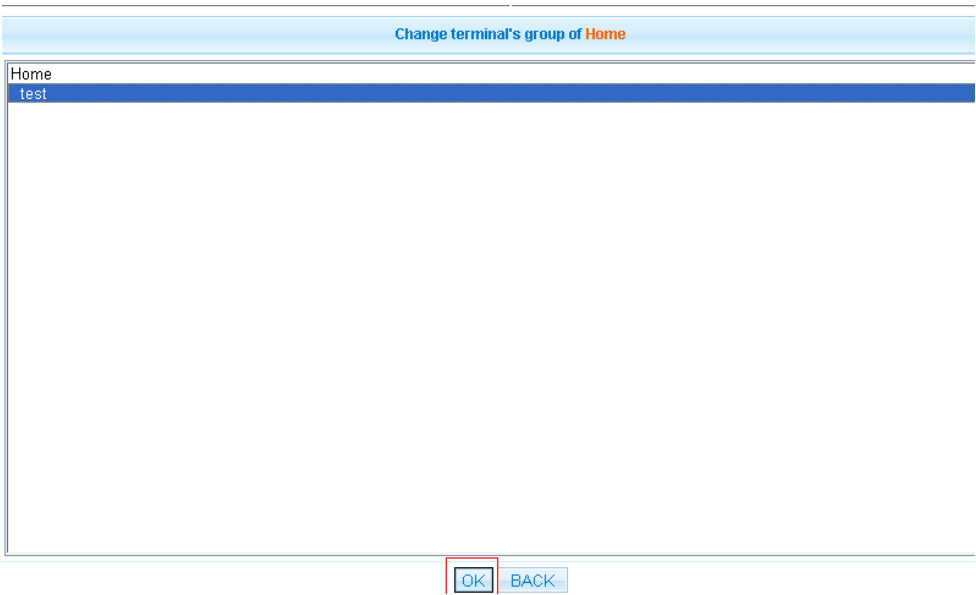
- Click “group” to get into group
- Click a terminal group name on the left directory tree, and then click “ Manage Group” on the right top side to get into the “manage group” page.
- Click “Change terminal's group of xxx (group name)” to get into “change group of terminal”.
- Select terminal
 - 1) Select a terminal: click the terminal
 - 2) Select multiple terminals: press “ctrl” meanwhile select multiple terminals.
 - 3) Select multiple terminals from beginning to end: click a terminal, then keep pressing “shift”, meanwhile, press another terminal. Thus all terminals from beginning to end are selected.
- Press “” to move terminals from left side to the blank area in right side.
- Also terminals in the blank area in right side can be selected and then press “” to move them to left side to cancel change operation. Refer to the following “Image 2-43 change group of terminal-select terminal”

Image 2-43 Change group of terminal-select terminal



- Click “next”, select a group to which the terminals will be moved, then click “OK” to move the terminal to a new group. Refer to “Image 2-44 Select new group for terminal”.

Image 2-44 Select new group for terminal



2.5.6 Edit terminal


Task intro

To edit terminal is to edit the agent ID, Location info of a terminal.

Precondition

Login user is a legal user of the platform, and login on the platform successfully.

Operation steps

- Click “group” to get into group, default display is terminal list of Home directory.
- Click terminal group in the tree directory on the left side to show all terminals in the group.
- Click “” at the end of the terminal, and edit agent ID and Location info in this page. Click “OK” to finish editing. Whether the input info is legal or not, please refer to “table 2-7 input info requirement for editing terminal”.

2-4 input info requirement for editing terminal

Item	Content	How to Configure
Agent ID	Terminal name	Manual input. Value range: 16 digits combination of No. or alphabet
Location	Terminal installation location	Manual input. Value range: No. 0~255, alphabet, exclusive of specific character.

2.5.7 Delete terminal

Task intro

To delete terminals in a group in two ways: to delete single terminal, to delete all terminals in a group.

Precondition

Login user is a legal user of the platform, and login on the platform successfully.

Operation steps

- Click “Group” to get into the group. The default display of the page shows the terminal list of Home.
- Click terminal name in the directory tree on the left side to shall terminal list in this group.
- Click “✖” icon at the end of terminal line, then click “OK” in the new window to delete this terminal. Click “Cancel” to get back to the previous page without deleting.
- Click “ ✖Delete all ” of the terminal list at the top right side, then click “OK” to delete all terminals in this group. Click “Cancel” to back to the previous page without deleting.

2.6 System section

Function intro

To manage all parameters of the platform including: warning threshold setting, import and export rule, blacklist management, add and delete update packet, update terminals in batch, check system log.

Precondition

Login user is admin and login on the platform successfully.

2.6.1 Warning threshold setting (Set SLA)

Task intro

To set threshold of terminal online rate, packet loss rate, signal strength, restart times, cell switchover times, and SIM card switchover times. If the above values exceed the threshold value, warning will be triggered and a warning message will come out. Warning messages records can be refer ton in warning list.

Precondition

Login user is admin and login on the platform successfully.

Operation steps


- Click “System >  SLA set ” to get into “Set SLA”, default warning threshold is displayed.
Refer to “Image 2-45 set warning threshold value”.

Image 2-45 Set warning threshold value

Set SLA	
Availability <	<input type="text" value="90"/> % *
Packet loss >	<input type="text" value="60"/> % *
Signal <	<input type="text" value="-100"/> dBm *
Out of service >	<input type="text" value="8"/> *
Cell switch >	<input type="text" value="9"/> *
SIM switch >	<input type="text" value="9"/> *

Note: If terminal meets any of above SLA parameters, alarm will be triggered and terminal will be listed in 'Alarmed list'.

- Input legal threshold value, click “OK” to set threshold value. For threshold value, please refer to “table 2-8 set warning threshold value”.

2-4 Set warning threshold value

Parameter name	Description	How to Configure
Availability	Terminal online rate threshold	Manual input. Value range: integral No. within [1,100]
Packet loss	Terminal packet loss rate threshold	Manual input. Value range: integral No. within [1,100]
Signal	Terminal signal strength threshold	Manual input. Value range: integral No. within [-113,-51]
Out of service	Terminal restart times threshold	Manual input. Value range: integral No. within [1,10]

Parameter name	Description	How to Configure
Cell switch	Cell switchover times threshold	Manual input. Value range: integral No. within [1,10]
SIM switch	SIM card switchover times threshold	Manual input. Value range: integral No. within [1,10]

2.6.2 Import rule

Task intro

Import rule: setup legal terminal list (judge by last 16 number of terminal serial number), platform will judge the legality of a terminal as per the import rule and will move terminals, which don't fit import rule, into the group of "pending".

Precondition

Login user is admin and login on the platform successfully.

Operation steps

Import rule




- This feature is use the same “terminal serial number list” as the “Auto install” feature in platform. There are two cases:
 - (1) User need to use “auto install” feature to send parameter from platform to terminal.

In this case, user setup rules with all parameters that are needed, like APN, Username, and Password. If a terminal tries to register to platform, according to the serial number, parameters will be sent to the terminal.

- (2) Terminal already contains the pre-set parameter, so no need to use the “Auto install” feature.

In this case, user have to note, if the rule contains APN, Username or password, wtmp IP, etc the auto install feature still will act as designed, which means parameters will be sent to terminal and modify the pre-set parameters in terminal. So user must pay attention to this feature. And remember, if don’t want pre-set parameters to be changed, when setup rules. Leave the “terminal ID” only.

- Before importing rule file, please assure that no other program is in use and this file is not in use.
- When import .xls doc, please refer to export templates in “2.6.3 export rule”.

-
- Click “system > 

Import rule



- After rule is imported, the page will show imported rule list. Refer to “Image 2-47 rule list”.

Image 2-47 Rule list

There are 30 rules in system.

	Download Template	Import Rule	Export Rule		
wmmp-port	sim-1	apn-1	user-1	pwd-1	sim-2
21334	15989385978	aaaode	bbb	ccc	13865458971
345678	15989385978	aaaode	bbb	ccc	13865458971
21334	15989385978	aaaode	bbb	ccc	13865458971
345678	15989385978	aaaode	bbb	ccc	13865458971

Import public parameter rule


- Click “System >  Auto install”, then click “Parameter” tab to get into the page.
- Input public parameter in the textbox, then click “Save” to save the parameters.
- Click “View parameters” to visit imported public parameter rules. Refer to “Image 2-48 import public parameter rule”.

Image 2-48 Import public parameter rule

2.6.3 Export rule

Task intro


Export rule: export rule list of the platform into an excel file and save in local PC.

Precondition


Login user is admin and login on the platform successfully.

Operation steps

Export rule template

- Click “System >  Auto install”, click tab “Rule List” to get into the page.
- Click “Download Template” button to download import rule Excel template.

Export template

- Click “System >  Auto install” click tab “Rule List” to get into the page.
- Click “Export Rule” to download rule list excel doc.

2.6.4 Pending list


Task intro

Pending list function is to manage terminals of the platform beyond rule list.

Precondition

Login user is admin and login on the platform successfully.

Operation steps

- Click “System >  Authorization”, then click tab “Pending List” to get into the page, terminals of pending list is shown.

2.6.5 Move terminals from Pending list to Blacklist

Task intro



To move terminals from pending list to blacklist. Platform will not record login info or status of the terminals.

Precondition


Login user is admin and login on the platform successfully.

Operations steps



Option 1

- Click “System >  Authorization”, then click “Pending List” tab to get into the page. Terminals of pending list are shown.
- Click “ ” icon in the line of terminal (“To blacklist” row) to move terminal into blacklist.

Option 2

- Click “System >  Authorization”, then click “Pending List” to get into the page. Terminals of pending list are shown.
- Click the checkbox at the beginning of the terminal line. Select one or multiple checkboxes and then click “To blacklist” to move the terminals from pending list to blacklist.

Option 3

- Click “System >  Authorization”, then click “Pending List” to get into the page. Terminals of pending list are shown.
- Click “ All to blacklist ” of the terminal list on the right top side to move all terminals from

pending list to black list.

2.6.6 Move terminals from pending list to home group

Task intro



To move terminals from pending list to home group and the moved terminals will be legal and will be shown in the rule list of the platform. Meanwhile the platform will treat the moved terminals as legal terminals and record their operation info.

Precondition


Login user is admin and login on the platform successfully.

Operations steps



Option 1

- Click "System >  Authorization", then click "Pending List" to get into the page. Terminals of pending list are shown
- Click " " in the line of terminal ("To Home" row) to move the terminal to Home group.

Option 2

- Click "System >  Authorization", then click "Pending List" to get into the page. Terminals of pending list are shown
- Click the checkbox at the beginning of the terminal line. Select one or multiple checkboxes and then click "To home" to move the terminals from pending list to Home group.

Option 3

- Click "System >  Authorization", then click "Pending List" to get into the page. Terminals of pending list are shown.
- Click " All to home " of the terminal list on the right top side to move all terminals from pending list to Home group.

2.6.7 blacklist


task intro

Blacklist: black terminals list. The platform will record the basic info in first registration of the terminal and will not provide any service to terminals in blacklist.

Precondition

Login user is admin and login on the platform successfully.

Operations steps

- Click “System >  Authorization”, then click “blacklist” tab to show terminal list in blacklist.

2.6.8 Move terminals from blacklist to pendinglist

Task intro



Move terminals from blacklist to pending list. After this, platform will provide basic online service to terminals and will update the online status of the terminals.

Precondition


Login user is admin and login on the platform successfully.

Operations steps



Option 1

- Click “System >  Authorization”, then click “Blacklist” tab to show blacklist terminals.
- Click “ ” icon in the line to terminal (“To pending list” row) to move the terminal to pending list.

Option 2

- Click “System >  Authorization”, then click “Blacklist” tab to show blacklist terminals.
- Click check box at the beginning of the terminals, select one or multiple terminals, then click “To pending list” to move selected terminals to pending list.

Options 3

- Click “System >  Authorization”, then click “Blacklist” tab to show blacklist terminals.
- Click “  All to pending list ” on the right top side of terminal list page to move all terminals in black list to pending list.

2.6.9 Move terminals from blacklist to Home

Task intro



Move terminals from blacklist to home group. The moved terminals will be legal and their info will be added in rule list of the platform. Meanwhile, platform will treat them as legal terminals and will record their all operation info.

Precondition


Login user is admin and login on the platform successfully.

Operations steps



Option 1

- Click "System >  Authorization" then click "Blacklist" tab to show blacklist terminals.
- Click " " on the terminal line ("To home" row) to move the terminal to Home.

Option 2

- Click "System >  Authorization" then click "Blacklist" tab to show blacklist terminals.
- Click check box at the beginning of the terminals, select one or multiple terminals, then click "To home" to move selected terminals to Home group.

Option 3

- Click "System >  Authorization", then click "Blacklist" tab to show blacklist terminals.
- Click " All to home" on the right top side of terminal list page to move all terminals in black list to Home

2.6.10 Upload upgrading packet

Task intro

Upload the updating packet of designated path to server, after uploading, the packet can be used to upgrade the terminals remotely.

Precondition

Login user is admin and login on the platform successfully.

Operations steps




- Click "System", default display is Set SLA page.
- Click " Firmware&Patch", then click " AddPackage" to get into the "add upgrade package" page. Refer to "Image 2-49 package list page".

Image 2-49 Page list page

Package list		
Create date	Description	
2011-12-07 09:45:41		
<div> AddPackage</div>		

Input legal info, click “Browse” button, and then select upgrade package in the new dialog box. Then click “OK” to set the path of the upgrade package.

- Click “OK” to upload. For reselecting, please click “Reset” as shown below.

Image 2-50 Add upgrade package

Add upgrade package	
Name:	<input type="text"/> *
Version:	<input type="text"/> *
Description:	<input type="text"/>
Upload:	<input type="text"/> Browse... *
<input type="button" value="OK"/> <input type="button" value="Reset"/>	

Refer to table 2-9 to check whether the input is legal or not.

2-4 Key item explanation

Item name	content	How to configure
Name	Upgrade package name	Manual input Value range: 4-63, no such special character as <, >, &, ', ", ?, =
Version	Upgrade package version	Manual input Value range: 4-63, no such special character as <, >, &, ', ", ?, =
Description	Description	Manual input Value range: 0-255, no such special character as <, >, &, ', ", ?, =

2.6.11 Edit upgrade package

Task intro

To change the name, version, description of the upgrade package uploaded to server.

Precondition

Login user is admin and login on the platform successfully.

Operations steps





- Click “System”, default display is Set SLA page.
- Click “ Firmware&Patch”, then click “” to get into the “modify upgrade package” page. Please refer to “Image 2-51 package list”.

Image 2-51Package list

Description			Edit	Delete
				

Input legal info of upgrade package. Check if is legal or not, please refer to “table 2-9 key word explanation”. Click “OK” to execute editing operation. To re-input info, please click “Reset”. Refer to “Image 2-52 modify upgrade package”.

Image 2-52 modify upgrade package

Modify upgrade package	
Name:	<input type="text" value="aaaaaaa"/> *
Version:	<input type="text" value="term_fkey"/> *
Description:	<input type="text"/>
<input type="button" value="OK"/> <input type="button" value="Reset"/>	

2.6.12 Delete upgrade package

Task intro



To delete upgrade package uploaded to server. After deleting, its relevant info

will be deleted too. Platform cannot use this package to upgrade terminal.

Precondition

Login user is admin and login on the platform successfully.

Operations steps

- Click “System”, default display is Set SLA page.
- Click “ Firmware&Patch” and click “” icon, then click “OK” in the dialog to delete.
If not need to delete, click “Cancel”.

2.6.13 Timing remote upgrade terminals (batch upgrade)

Task intro

Timing remote upgrade terminals, select the beginning terminal ID and ending ID, select beginning time, end time and upgrade package. All terminals between the two IDs will be upgraded in the designated time.


Precondition

Login user is admin and login on the platform successfully.

Operations steps



- End ID must be filled.
 - If time is not selected, upgrade will be executed immediately; if time is selected, upgrade will be executed in selected time.
-

- Click “System”, default display is Set SLA page.
- Click “ Batch upgrade” to get into batch upgrade page.
- Input legal condition, and select the check box in the first row of the upgrade package list.
Legal info please refer to “table 2-10 key word explanation”.

2-4 key word explanation

Item name	content	How to input
Terminal ID	Terminal id	Manual input. Value range: 16 digits combination of No. and alphabet.

Item name	content	How to input
Time frame	to select upgrade time	To select time manually dropdown box.

- Click “Remote upgrade” button to upgrade terminals in batch. Click “Reset” to input condition again. Click “Upgrade progress status” to check upgrade status. Refer to “Image 2-53 batch upgrade”.

Image 2-53 Batch upgrade

- Click “Upgrade again” to execute upgrade terminal once again. Refer to “Image 2-54 upgrade process page”.

Image 2-54 Upgrade process page

7 terminals are selected, 5 are being upgraded, 0 is offline, 0 not exist		
Package Name: aaaaaaa		Upgrade again
Package name	Upgrade progress bar	Percent
H7932__trx	Download failed, need to redo upgrade process.	
H7932__trx	<div></div>	91.88%
H7932__trx	<div></div>	91.89%
H7932__trx	Download failed, need to redo upgrade process.	
H7932__trx	<div></div>	91.89%
H7932__trx	<div></div>	87.53%
H7932__trx	<div></div>	91.89%

2.6.14 Search system log

Task intro

System log has recorded terminals remote upgrade, auto install, registration, login in and out, parameter configuration. As per the above log type, terminal ID and time to search the above info record.


Precondition

Login user is admin and login on the platform successfully.

Operations steps



- If all search conditions can be blank, all system logs will be searched.
 - Support fuzzy search, key words can be input to search.
-

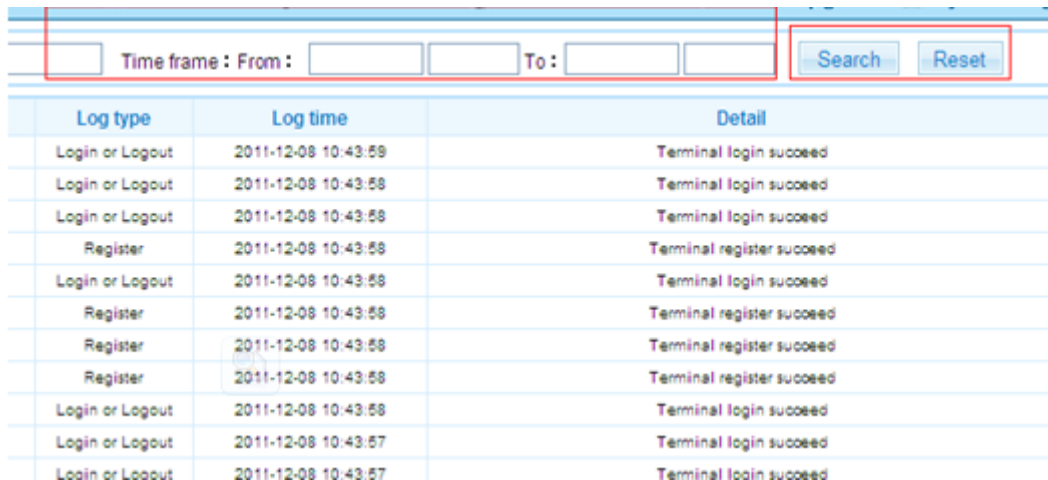
- Click “System”, default display is Set SLA page.
- Click “ System log” on the right top side of the page to get into the system log page.
- Input legal searching condition. Please refer to “Image 2-11 search condition explanation” as below.

2-2 Searching condition explanation

Item name	content	How to input
Log type	Log type	Select from the pull-down box.
Terminal ID	Terminal ID No.	Manual input. Value range: 16 digits combination of No. and alphabet.
Time frame	Time range	Select from the pull-down box.

- Click “Search” button to search terminal log info. Click “Reset” button to input search condition again. Refer to “Image 2-55 system log”.

Image 2-55 System log



Log type	Log time	Detail
Login or Logout	2011-12-08 10:43:59	Terminal login succeed
Login or Logout	2011-12-08 10:43:58	Terminal login succeed
Login or Logout	2011-12-08 10:43:58	Terminal login succeed
Register	2011-12-08 10:43:58	Terminal register succeed
Login or Logout	2011-12-08 10:43:58	Terminal login succeed
Register	2011-12-08 10:43:58	Terminal register succeed
Register	2011-12-08 10:43:58	Terminal register succeed
Register	2011-12-08 10:43:58	Terminal register succeed
Login or Logout	2011-12-08 10:43:58	Terminal login succeed
Login or Logout	2011-12-08 10:43:57	Terminal login succeed
Login or Logout	2011-12-08 10:43:57	Terminal login succeed

2.7 User section

Function intro

User module will manage user info, including adding a new common user, edit user info, delete a common user. Admin has been authorized to manage all users, while a common user can edit his own info.

2.7.2 Add user

Task intro

To add a new user in platform, a common user can visit terminal and group module, but cannot visit system module and cannot add new user, edit other users' info, delete use in user module.


Precondition

Login user is admin and login on the platform successfully.

Operations steps



User name in the platform cannot be repeated.

- Click "User >  Add User" to get into "add user" page.
- Input legal user name, password, description, then click "OK" to add a new user. Refer to "table 2-12 user basic info input explanation".

2-5 user basic info input explanation

Item name	content	How to input
Username	Use name	Manual input. Value range: 4-15 digits No., alphabet, exclusive specific cymbal.
Password	User password	Manual input. Value range: 4-15 digits No., alphabet, exclusive specific cymbal.
Confirm pass	Confirm password	Manual input. Value range: 4-15 digits No., alphabet, exclusive specific cymbal.
Description	User info description	Manual input. Value range: 0-255 digits No., alphabet, exclusive specific cymbal.

2.7.3 Edit user

Task intro


To edit the user's basic info (password, description), admin can edit all users info, while common user can edit his own info.

Precondition

Login user is a legal user of the platform, and login on the platform successfully.


Operations steps

Admin user

- Click "User" to get into user list page.
- Click " " at the end of user line to get into "edit user" page.
- Input new password, description, click "OK" to finish editing. How to input, please refer to "table 2-12 user basic info input explanation".

Common user

- Click "user" to get into user list page.

- Click “ Edit Password” on the right top side of the page to get into edit user page.
- Input new password and description, click “OK” button to finish editing. For how to input, please refer to “table 2-12 user basic info input explanation”.

2.7.4 Delete user


Task intro

Delete legal common users in the platform.

Precondition

- 1) Login user is a legal user of the platform, and login on the platform successfully.
- 2) Login user is admin.

Operation steps

- Click “User” to get into user list page.
- Click “ ” at the end of user line, then click “OK” button in the new dialog to finish deleting. Click “Cancel” button not to delete and get back to previous page.